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EXAMINER

COLAN, GIOVANNA B

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/803,788	Applicant(s) BOJINOV ET AL.	
	Examiner GIOVANNA COLAN	Art Unit 2162	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 – 5, and 30 – 65 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 – 5, and 30 – 65 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is issued in response to applicant filed request for continued examination (RCE) on 11/25/2008.
2. Claims 30 – 31, 33, 38, 40, 46, 51, 53, 59, and 64 have been amended. Claim 65 was added. Claims 6 – 29 were canceled.
3. Claims 1 – 5, and 30 – 65 are pending in this application.

Continued Examination Under 37 CFR 1.114

4. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/11/2006 has been entered.

Response to Arguments

5. Applicant's arguments with respect to claims 1 – 5, and 30 – 65 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1 – 2, 4 – 5, 30 – 34, 36 – 40, 42 – 47, 49 – 53, 56 – 60, 62 – 64, and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandrashekhara et al. (Chandrashekhara hereinafter) (2005/0033988 A1) in view of Yaniv Gvily (Gvily hereinafter) (US 2002/0078201).

Regarding Claims 1, 32, and 38, Chandrashekhara discloses a method for establishing identity in a file system, comprising:

receiving a file request concerning an indicated file from a client, the request received by a proxy (Page 4, [0059] - [0061], Chandrashekhara);

forwarding the request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhara);

returning a reply associated with the file request from the file server to the proxy (Page 4, [0066], Chandrashekhara);

inserting, by the proxy, metadata into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhara and also see Page 4, [0077] and [0078], Chandrashekhara)

Chandrashekhara also discloses sending, by the proxy the file handle to the client (Page 4, [0070], Chandrashekhara). However, Chandrashekhara does not explicitly disclose sending, by the proxy, the file handle with the metadata inserted in the file handle to the client. On the other hand, Gvily discloses: inserting, by the proxy,

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metadata into the file handle ([0018], Gvily); and sending, by the proxy, the file handle with the metadata inserted in the file handle to the client, the metadata to be used in further requests to identify the client and the indicated file ([0027], Gvily). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Chandrashekhar by incorporating the step of sending, by the proxy, the file handle with the metadata inserted, in the same conventional manner as disclosed by Gvily. Skilled artisan would have found it motivated to use such a modification in order to store and hide data from the user's view, so that it is unobtrusive (see; [0004], Gvily).

Regarding Claims 2, 34, 47, and 60, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising the step of:

using the metadata in the file handles for any of eliminating a need for the proxy to generate additional requests to the server to establish file identity, and for completing client requests (Page 4, [0085], Chandrashekhar).

Regarding Claims 4, and 36, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

using an NFS file system as the file system (Page 3, [0037], Chandrashekhar).

Regarding Claims 5, and 37, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

using a stateless protocol by the file system (Page 3, [0037], Chandrashekhar).

Regarding Claims 30, and 33, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

receiving, from the client, a second file request by the proxy (Page 4, [0061], Chandrashekhar), the second file request including the metadata in a further file handle sent with the second request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar; and [0018], and [0027], Gvily);

identifying, in response to the metadata, the client as to submit the second file request (Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the metadata with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy the further reply from the file server, and sending by the proxy the further reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claim 31, the combination of Chandrashekhar in view of Gvily discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, metadata into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

sending, by the proxy, the file handle with the metadata inserted in the file handle to the client, the metadata to be used in further requests to identify the client as having a permission to access the indicated file ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0070], Chandrashekhar);

receiving, from the client, a second file request by the proxy (Page 4, [0061], Chandrashekhar), the second file request including the metadata in a further file handle sent with the second request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar; and [0018], and [0027], Gvily);

identifying, in response to the metadata, that the client has the permission to submit the second file request ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the metadata with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 39, and 45, the combination of Chandrashekhar in view of Gvily discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

granting permission for the request to be acted upon by the file system in response to a predetermined protocol ([0009], "The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client", Page 4, [0068], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, a session key into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar; and also see Page 4, [0077] and [0078], Chandrashekhar); and

sending, by the proxy, the file handle with the session key inserted in the file handle to the client, the session key to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar).

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Regarding Claims 40, and 46, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

receiving, from the client, a second file request by the proxy (Page 4, [0061], Chandrashekhar), the second file request including the session key in a second file handle sent with the second file request ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client”, Page 4, [0068], Chandrashekhar; and [0018], and [0027], Gvily);

sending the second file request to the file server and not sending the session key with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 43, and 49, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

using a NFS protocol as the predetermined protocol (Page 3, [0037], Chandrashekhar).

Regarding Claims 44, and 50, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

using as the predetermined protocol a two way communication exchange between the proxy and the file server (Fig. 1, Chandrashekhar).

Regarding Claim 51, the combination of Chandrashekhhar in view of Gvily discloses an apparatus to establish identity in a file system, comprising:

a proxy to receive a first file request sent by a client to a file system, the proxy to forward the first file request to a file server (Page 4, [0059] - [0061], Chandrashekhhar);

the file server to return a reply associated with the first file request to the proxy (Page 4, [0066], Chandrashekhhar);

the proxy to insert a session key into a file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhhar and also see Page 4, [0077] and [0078], Chandrashekhhar);

the proxy to send the file handle with the session key inserted in the file handle to the client, the session key to be used in a second file request to identify the client and the indicated file (Page 4, [0070], Chandrashekhhar);

the proxy to receive, by the client, a second file request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhhar and also see Page 4, [0077] and [0078], Chandrashekhhar), the second file request to include the session key in a second file handle sent with the second file request ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client”, Page 4, [0068], Chandrashekhhar; and [0018], and [0027], Gvily);

the proxy to receive the second file request, and the proxy to identify, in response to the session key, the client having a permission to submit the second file request, and the proxy to send the second file request to the file server and not to send the session key with the second file handle to the file server ([0009], “The method includes

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requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0085] and [0059], Chandrashekhar); and

the proxy to receive a second reply from the file server, and the proxy to send the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claims 52, and 58, the combination of Chandrashekhar in view of Gvily discloses a method for establishing identity in a file system, comprising:

receiving a first file request concerning an indicated file from a client, the first file request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the first file request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

determining that the client has a permission to have the request acted upon by the file system in response to a predetermined protocol ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0068], Chandrashekhar);

returning a reply associated with the first file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, a cryptographic information into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar; and also see Page 4, [0077] and [0078], Chandrashekhar);

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sending, by the proxy, the file handle with the cryptographic information inserted in the file handle to the client, the cryptographic information to be used in one or more requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhar).

Regarding Claims 53, and 59, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

receiving, by the client, a second file request by the proxy, the second file request including the cryptographic information in a second file handle sent with the second file request (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar; and [0018], and [0027], Gvily);

identifying, in response to the cryptographic information, that the client has permission to submit the second file request ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0068], Chandrashekhar);

sending the second file request to the file server and not sending the cryptographic information with the second file handle to the file server (Page 4, [0070], Chandrashekhar); and

receiving by the proxy a second reply from the file server, and sending by the proxy the second reply to the client (Page 4, [0070], Chandrashekhar).

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Regarding Claims 56, and 62, the combination of Chandrashekhar in view of Gvily discloses a method, further comprising:

using a NFS protocol as the predetermined protocol (Page 3, [0037], Chandrashekhar).

Regarding Claims 57, and 63, the combination of Chandrashekhar in view of Gvily discloses a method according, further comprising:

using as the predetermined protocol a two way communication exchange between the proxy and the file server (Fig. 1, Chandrashekhar).

Regarding Claim 64, the combination of Chandrashekhar in view of Gvily discloses an apparatus to establish identity in a file system, comprising:

a proxy to receive a first file request sent by a client to a file system, the proxy to forward the first file request to a file server (Page 4, [0059] - [0061], Chandrashekhar);

the file server to return a reply associated with the first file request to the proxy (Page 4, [0066], Chandrashekhar);

the proxy to insert a cryptographic information into a file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhar and also see Page 4, [0077] and [0078], Chandrashekhar);

the proxy to send the file handle with the cryptographic information inserted in the file handle to the client, the cryptographic information to be used in a second file request to identify the client and the indicated file (Page 4, [0070], Chandrashekhar);

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the proxy to receive, by the client, a second file request, the second file request to include the cryptographic information in a second file handle sent with the second file request (Page 4, [0085] and [0059], Chandrashekhar; and [0018], and [0027], Gvily);

the proxy to receive the second file request, and the proxy to identify, in response to the cryptographic information, the client as having a permission to submit the second file request, and the proxy to send the second file request to the file server and not to send the cryptographic information with the second file handle to the file server ([0009], “The method includes requesting for a file from a client to the proxy server and authenticating a requesting user of the client“, Page 4, [0085] and [0059], Chandrashekhar); and

the proxy to receive a second reply from the file server, and the proxy to send the second reply to the client (Page 4, [0070], Chandrashekhar).

Regarding Claim 65, the combination of Chandrashekhar in view of Gvily discloses a method for establishing identity in a file system, comprising:

receiving a file request concerning an indicated file from a client, the request received by a proxy (Page 4, [0059] - [0061], Chandrashekhar);

forwarding the request from the proxy to a file server (Page 4, [0062] - [0065], Chandrashekhar);

returning a reply associated with the file request from the file server to the proxy (Page 4, [0066], Chandrashekhar);

inserting, by the proxy, metadata into the file handle (Page 3 and 4, [0055] and [0067] – [0069]; respectively, Chandrashekhhar and also see Page 4, [0077] and [0078], Chandrashekhhar; and [0018], Gvily); and sending, by the proxy, the file handle with the metadata inserted in the file handle to the client, a size of the file handle set to a sum of a length of the server file handle and a length of the proxy metadata ([0012], and [0038], Chandrashekhhar), the metadata to be used in further requests to identify the client and the indicated file (Page 4, [0070], Chandrashekhhar; and ([0027], Gvily).

8. Claims 3, 35, 41, 48, 54 – 55, and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chandrashekhhar et al. (Chandrashekhhar hereinafter) (2005/0033988 A1), in view of Yaniv Gvily (Gvily hereinafter) (US 2002/0078201), and further in view of Ohazama et al. (Ohazama hereinafter) (US 7,225,207 B1).

Regarding Claims 3, and 35, the combination of Chandrashekhhar in view of Gvily (Chandrashekhhar/Gvily hereinafter) discloses all the limitations as discussed above including a method, further comprising: encoding metadata in a form of a session key into the file handle. However, Chandrashekhhar/Gvily does not expressly disclose that such session expires. Ohazama discloses: a session key which expires after a predetermined amount of time (Col. 7, lines 60 – 63, Ohazama). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the Ohazama's teachings to the system of Chandrashekhhar/Gvily. Skilled artisan would have been motivated to do so, as suggested by Ohazama (Col. 7, lines 55

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– 63, Ohazama), to provide validate the user and restrict access to the database, and to prevent old session keys from being stolen or reused.

Regarding Claims 41, and 48, the combination of Chandrashekhar in view of Gvily and further in view of Ohazama (Chandrashekhar/Gvily/Ohazama hereinafter) discloses a method according to claim 39, further comprising:

causing the session key to expire after a selected amount of time (Col. 7, lines 60 – 63, Ohazama).

Regarding Claims 42, Chandrashekhar/Gvily/Ohazama discloses a method, further comprising:

causing the session key to expire after a selected amount of usage (Col. 14, lines 7 – 14, Ohazama).

Regarding Claims 54, and 61, Chandrashekhar/Gvily/Ohazama discloses a method, further comprising:

causing the cryptographic information to expire after a selected amount of time (Col. 7, lines 60 – 63, Ohazama).

Regarding Claim 55, Chandrashekhar/Gvily/Ohazama discloses a method, further comprising:

causing the cryptographic information to expire after a selected amount of usage (Col. 14, lines 7 – 14, Ohazama).

Points Of Contact

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to GIOVANNA COLAN whose telephone number is (571)272-2752. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Giovanna Colan
Examiner
Art Unit 2162
February 11, 2009

/John Breene/
Supervisory Patent Examiner, Art Unit 2162